

above all for himself. He was a fine type of a Christian gentleman. Generous of his time and means and of a retiring disposition, yet he always was ready to give helpful counsel to his younger associates. The writer served under and with Professor Henry for more than 40 years, a part of that time at Mount Weather, where most of the staff lived under the same roof, and in all these years neither knew nor heard of any unkind or unjust act on his part.

Professor Henry was a fellow of the American Association for the Advancement of Science, and of the American Meteorological Society. He was a member of the American Geophysical Union, and a former secretary of its Meteorological Section; a former secretary of the National Geographical Society; and a member of the American Association of Geographers, the Washington Academy of Sciences, and the Philosophical Society of Washington. He was fond of outdoor sports. In his

younger days he was a base ball enthusiast and a bicyclist with "century runs" to his credit. In later years golf was his recreation. He also was an amateur photographer of merit, and some of his cloud photographs have been used in cloud literature as types of the classes they represent.

In character, in industry, in loyalty, in devotion to his work, which led him to take advantage of every opportunity to prepare himself for greater usefulness, his life and its successes should be an incentive to younger men who now enjoy opportunities greater than were his. Above all they must remember that the foundation of his success was *character*.

The death of his talented daughter, Helen, in 1930, an only child, was a severe blow, from which he never fully recovered. His wife, Mrs. Jessie H. Henry, survives him.—*Herbert H. Kimball*.

PRESTON C. DAY, 1859-1931

Dr. P. C. Day was born in Frederick County, Md., October 21, 1859. He entered the Signal Corps (Weather Bureau) June 29, 1883, and after the usual six months of training at Fort Myer (formerly Fort Whipple) began his service of more than 46 years at the Central Office.

He was a man of sterling character, much liked by every one, a hard and conscientious worker, doing everything properly and on time. He was graduated from the National College of Pharmacy, Washington, D. C., on May 7, 1906.

Doctor Day was made Chief of the Climatological Division of the Weather Bureau September 12, 1910, and continued in that position until his retirement, because of ill health, on May 28, 1930. He died at his home in Washington, D. C., on October 21, 1931.

He was author of a number of papers relative to climatology, some of which are: "A Discussion of the Occurrence of Frost in the United States" (Bulletin V, of the Weather Bureau); "Relative Humidity and Vapor Pressure of the United States" (Supplement No. 6, Monthly

Weather Review); "A Discussion of the Climate of the United States by Sections" (Bulletin W, of the Weather Bureau); a paper on the Climate of France and Belgium, in the MONTHLY WEATHER REVIEW for October, 1917; a discussion of the "Cold Winter of 1917-18," MONTHLY WEATHER REVIEW for December, 1918; and "A Treatise on the Winds in the United States," published in the Yearbook of the Department of Agriculture.

Doctor Day was editor of the MONTHLY WEATHER REVIEW from 1910 to 1913, inclusive, editor of the National Weather and Crop Bulletin for a number of years, and editor of the Snow and Ice Bulletin from 1910 until the time of his retirement.

He was a fellow of the American Meteorological Society, and at its Washington meeting in the spring of 1926 he presented a thorough discussion of the precipitation of the Great Lakes region, a contribution that appeared in the MONTHLY WEATHER REVIEW, March, 1926.—*M. C. Bennett*.

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SOLAR OBSERVATIONS

SOLAR RADIATION MEASUREMENTS, OCTOBER, 1931

By HERBERT H. KIMBALL, in charge, Solar Radiation Investigations

For a description of instruments employed and their exposures, the reader is referred to the January, 1931, REVIEW, page 41.

Table 1 shows that solar radiation intensities averaged above the normal values for October at Washington and close to normal at Madison and Lincoln.

Table 2 shows an excess in the total solar radiation received on a horizontal surface at Lincoln, Chicago, New York, Pittsburgh, and Fresno as compared with October normals for the respective stations; close to normal at Madison, and a deficit at Washington and Twin Falls.

Skylight polarization measurements made on 4 days at Washington give 63 for the mean percentage of polarization, with a maximum of 70 per cent on the 20th. At Madison, polarization measurements made on 10 days give a mean of 65 per cent with a maximum of 76 per cent on the 18th. These are above the corresponding averages for each station in October.

CORRECTION.—Owing to a misunderstanding as to the reduction factor that was required to reduce scale readings on the register to heat units the weekly averages given in Table 2 for September, 1931, for Twin Falls are too small. For the successive weeks they should read 523, 512, 398, and 464 and the departures from normal should be -9, +5, -77, and +29.

SOLAR RADIATION MEASUREMENTS AT FAIRBANKS, ALASKA

A request for the installation of apparatus for recording the intensity of solar radiation at Fairbanks was made some time ago by the agricultural experiment station at that place. It was not immediately complied with for the reason that the cover of the Weather Bureau thermoelectric pyr heliometer was secured to the metal base by cement, which did not make a permanently tight joint. Occasionally moisture condensed on the inside of the

cover, which could be removed only after the instrument had been recalled to the central office.

The Eppley thermoelectric pyr heliometer is hermetically sealed inside a glass bulb, which has been carefully dried out. Little difficulty from condensation of moisture inside the bulb is therefore to be expected.

An Eppley pyr heliometer, recording on an Englehard microammeter was installed at Fairbanks early in August, 1931. It is exposed on a support 10 feet above the roof of the office building, where it has unobstructed exposure to the entire sky down to the horizon in all directions. The latitude of Fairbanks is 64° 52' N., and the altitude of the pyr heliometer above sea level is about 500 feet.

Fairbanks is much farther north than any other station at which solar radiation measurements of this character are now systematically made. The nearest approach to it is Sloutzk, U. S. S. R., latitude 59° 41' N. Records for the period September 4, 1927, to August 9, 1928, were, however, obtained at Green Harbor, Svalbard, latitude 78° 00' N. They are summarized in the MONTHLY WEATHER REVIEW, April, 1931, vol. 59, p. 154. Green Harbor is well within the Arctic Circle, while Fairbanks is 1° 31' below it. However, records from the latter station can not fail to be of interest.

The mean daily totals of radiation for each week in October are given in Table 2. The maximum daily amounts for each week are 61, 44, 42, and 40, respectively, and the corresponding hourly maxima are 11.9, 7.5, 8.1, and 7.5.

For the last three weeks in August the average daily amounts are, respectively, 322, 421, and 245, and the corresponding daily maxima are 486, 479, and 427. In September the averages for each week are, respectively, 55, 57, 40, and 46, while the maxima are 119, 103, 57, and 75. The average for the third week in August happens to be the same as the normal value for Washington for that week. All other averages are much less. In September the maximum daily amounts are less than the daily normals at any station in the United States in midwinter except in the smoky city of Chicago.